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Effect of Shyness on Peer Interaction:

A systematic Literature Review.

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ABSTRACT

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Internalizing behavior problems in childhood are hard to identify. Literature explain that children from two to six years might express this behavior in shyness. Shyness in childhood can affect the development of social skills and peer interaction. This review concentrated on childhood shyness aiming to attain a better comprehension of how shyness affect peer interaction during childhood with the help of two research questions of how children in the preschool environment are defined shy and how interaction with peers is affected by shyness: by identifying the tools used in assessing the relation between shyness and peer interaction. Four databases with literature from the fields of education and psychology were searched to retrieve research conducted on the topic of interest. The eight articles included were restricted by a date, country of publication and the age of the participant. Results show that children are defined shy based on the behavior they had in the classroom, with peers and teachers, how they spent their time around peers. This behavior had negative consequence on friendship and interaction between friends: poor communication, poor peer treatment with isolation, exclusion and rejection. Some of the instruments used were inCLASS, CBQ, SDQ, CBS, SCI. Childhood shyness might be linked to negative outcome during interaction, the treatment and reaction they receive from others might have negative consequences on how to behave and interact with peers. To promote their participation teachers have to engage them in the classroom and try to interact with them by providing and preparing a positive atmosphere in the class that will prompt the children to interact and not isolate or reject their shy mates.

Keywords: peer interaction, internalizing behavior problem, shyness, preschool children.

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I Introduction

Children are naturally born with temperament, which can be positive or negative. Research has shown the relationship between some temperament traits and internalizing behaviour problem, however there have been little research done on internalizing problems (depression, anxiety and withdrawal). Internalizing problems as well as negative temperament may be an obstacle for children's interactions and relationships with people around them. It is necessary for teachers and professionals to gain knowledge on the characteristics of shyness, how it affects peer interaction to be able to identify these children and provide early intervention for those socially at risk.

1.1 Social Skills

Experiences children have in the early stage of life are important because it shapes and affects the child's development. During the early life in preschool, children develop competences and skills through the assistance of social models and imitation (Bandura, 2004). One of these is social competence, which is the ability to use social, cognitive and emotional skills to have a relationship with other people around you.

As reported in Burgos' work, (2003), the author gives the definition of socializing as a process in which the infant becomes a social being progressively through *interiorization* (value and norms) and the access to *interaction* with others. Thus, the child starts to develop social competences right after birth through the interaction with the mother or care taker (Brazelton, Ainsworth, Bell & Stayton, 1971). At this stage, when the developmental process is at the acquisition and consolidation of non-verbal communication, the relationship between the child and caregiver is built through gestural and vocal denotation such as joint attention, laughing, crying, pointing and lallation. The relationship is bidirectional and the participants share the same meaning of the actions, the response to the toddler's gesture should be appropriate, on time and contingent to guarantee a positive emotional regulation to the child (Bruner, Trevarthen & Aitken, 2001, Stern, 2004).

The development of social competence is affected by the child's proximal environment, considered as the context closest to the child such as school, family and neighbourhood, and the kind of relationship with the caregiver (Bronfenbrenner & Morris 1998, Bowlby, 1958 & Vygotsky, 1962). These competences include initiating and maintaining a conversation, turn-taking, making eye contact, body posture, physically approaching peers and engaging peers in

parallel play (Stanton-Chapman, Walker & Jamison, 2014). Arslan, Durmuşoğlu-Saltali & Yilmaz (2011) found that children's engagement with peers in preschool environment are important to support the development of social skills. In addition, preschool context can provide an environment that promotes play and peer interaction and this is important in supporting children's learning.

1.2 Peer interaction

Building relationships is part of the development of children. Peer interaction occurs in a dyadic situation or in a group and it is referred to preschool children who share the same social context (Ladd, 2005). To understand the type of relationship children can create with their friends, it is important to examine the interplay of relationship within the children's social network (Hay, Payne & Chadwick, 2001). Children are born into different groups and space with different styles of relating to others that can influence the way they interact or associate with others/peers. Children who are active are seen as sociable and are more likely to have more friends. Relationships children create with their peers are very important for their development; together they take turns, cooperate and imitate each other during structured and unstructured play. Through these they acquire language and vocabulary, how to argue and negotiate with others without hurting each other (Hawley, Little & Pasupathi, 2002).

Peer interaction helps in establishing the first friendships during children's early years and it also serves as the bases for the development of self-esteem and self-identity. Thus, they learn about themselves during interaction with each other and use this information to form ideas about their own selves (Markus & Nurius, 1984). Friendships can affect children positively or negatively, these last ones are associated with aggressiveness, less engagement and peer rejection while on the other hand, positive friendship is identified with more cooperation and advanced social skills (Ladd, 1999).

However, children with behavioral problems may be at risk considering that they may be left out during peer interactions. Many studies have shown that children choose certain people to create relationship with, for example, aggressive children are not accepted by their peers because of their behavior, though they may have high social competences. This exclusion can influence the children's engagement and lead to the detriment of their scholastic progress (Buhs, Ladd & Herald, 2006). Shy and withdrawn children come rarely in contact with their peers and when this happens it takes them longer time to initiate a conversation. During this encounter, it appears that they are less socially competent than other children of the same age and most times

are disliked by their peers (Eggum et al. 2012). Shy children may easily encounter victimization, as presented by some researchers; they present themselves as physically and emotionally weak and evoke the attention of bullies. This group of children, contrary to what people may think, are able to form some few friendships during their academic years, most of the times with people experiencing or with the same type of difficulties (Bowen, Vitaro, Kerr & Pelletier, 1995).

Shy children may be withdrawn or left in isolation during interaction and play with peers. According to literature, there are two types of isolation: *active isolation*, where children play alone because their peers have rejected them or do not wish to play with them. In this case, the cause of the isolation is attributed to external factors (peers or other children). On the other hand, when the cause is internal (the choice of the child, anxiety, lack of social skills), it is called *passive social withdrawal*. This happens in the case, the child isolates him/herself from the peers during interaction (Rubin, 1982; Rubin & Mills, 1988; Rubin & Asendorpf, 1993; Rubin & Coplan, 2004).

Parents and teachers encourage positive peer interaction between children, since it has effects on learning and acquisition on social skills. Teachers promote peer interaction during free play and pair activities in the preschool environment, while parents are encouraged to attend with their children re-creative activities in the neighborhood, at local libraries and playground (Roseth, Johnson & Johnson, 2008).

Peer interaction is affected by the temperament and the behaviour of the children involved in the interaction. In case of a shy child, the relationship with the mates at the preschool may be affected negatively because of the characteristics of the behaviour or temperament.

1.3 Temperament and Behaviour problem

Temperament is a biologically based characteristic that influences the personality, emotionality and socially behaviour of the child, it can be modulated through the environment the child comes in contact with such as the parent's response (Goldsmith et al., 1987). There are three types of children: the easy, slow to warm up and the difficult. The first category contains children who easily adjust to new situations and are generally cheerful, the second are sometimes difficult but then they adjust with time and the last group is made up of children who react negatively and intensively to new events (Thomas, Chess & Birch, 1970). It has been demonstrated in some research the relation between temperament and some aspect of behaviour problems intended as internalizing and externalizing problem (Karreman, De Hass, Van Tuijl, Van

Aken & Dekovic, 2010 & Eisenberg et al., 2001). There was a clear evidence that the relation between temperament and internalizing problem was more pronounced over time. Children might express their internalizing problem through shyness (Eggum et al., 2012).

Shyness is considered as being part of childhood anxiety and it affects interactions during the early years. It is considered as a state that can be expressed in a positive or negative way with consequences for the person and the environment (Colonnesi, Napoleone, Bogels & King, 2014). Shyness occurs in new situations or places, where the child feels people around are been intrusive (Buss, Daly & McCroskey, 1984). Shy children are associated with a nonsocial form of play, the reticent behavior, meaning they may watch peers play without the intent to join and wander aimlessly (Coplan, Gavinski-Molina, Lagace Séguin & Wichmann, 2001, Coplan, 1998). These children are most of the times not willing to speak, emotionally withdrawn, socially anxious, are considered at risk for school adjustment, thus they are unpopular, and are unlikely to approach new people and situations (Rubin, Coplan & Bowker, 2009). Peer rejection exclusion and victimization are associated with shyness in early childhood (Gazelle & Ladd, 2003). This may have negative consequences on the children's development of some social skills, since they may not have the possibility of learning and putting them into practice (Dill, Vernberg, Fonagy, Twemlow & Gamm, 2004).

Shyness is associated with poor academic achievement and teacher rating performances (Hughs, Coplan & Kamphaus, 2010). Results from another study shows a negative association between shyness and the teacher-student relationship, thus children with shyness are less close and conflict relationship with their teachers and are less likely to approach them for help (Rydell, Bohlin & Thorell, 2005). However, studies have demonstrated how a positive relationship between children at risk at home and teachers can help reduce the negative consequences that this can have in future, whereas this relationship is seen as protective factor (Baker, Grant & Morlock, 2008; Hughes, Cavell & Jackson, 1999).

There is a number of tests available to identify children with behavior and temperament problem, the one most commonly used is the Child Behavior Questionnaire (CBQ; Putnam & Rothbart, 2006). The CBQ consists of questions to assess the temperament of children from three to seven years old. It is answered by a person who knows the child well (caregiver or parent) and alternatively by the teacher, who rate how likely the child's reaction will be in different situations. Another tool used is the Strength and Difficulty Questionnaire (SDQ; Goodman, 1997). Teachers and parents use this tool as proxy ratings or as self-ratings by children to assess the behavior of children from preschool age to middle adolescence (4 to 16), it

contains 25 items and measures 5 domains specifically emotional symptoms, conduct problem, hyperactivity, peer relation problem and prosocial behavior. Though, the SDQ is an instrument made for children from three years going, some items may be difficult to be interpreted for younger children due to the different phases of development and their related behavior problem (Goodman & Scott, 1999).

According to the evidence above the relation between temperament and behavior problem, certain temperaments are associated with behavior problem thus temperament influences the development of the child and its outcome (Rutter, 1987; Saudino, 2005). Researches have also shown the relation between low social competence and behavior problems, these are divided into internalizing (anxiety, withdrawal and depression) and externalizing (acting out, aggressiveness and inattention) (Eisenberg et al. 1998; Vahedi, Farrokhi & Farajian, 2012). Internalizing and externalizing are two different behavior problem clusters that are characterized and regulated by different emotions; children with externalizing problems are usually identified with anger, violence and inattention while internalizing behavior is the reverse, e.g shyness and withdrawal (Eisenberg et al., 2001).

Internalizing behaviors are inward towards the self; it can have psychological and emotional consequences and affect social life (Eggum-Wilkens, Valiente, Swanson & Lemery-Chalfant, 2014). Furthermore, it was also found that children with internalizing behavior problem displayed lower interactive peer play skills that may interfere with their academic achievement (Bulotsky - Shearer, Bell, Romero & Carter, 2012). Children, identified by teachers to have internalizing and externalizing behavior problems demonstrated less interactive peer play in early childhood classrooms. Fantuzzo with colleagues (2003) provides evidence that children with behavior problem are less likely to be able to establish positive peer relationship in the future.

Behavior problems can have diverse causes and can be multi-factorial; reactions may not emerge immediately, although they may arise later. For instance, both Im-Bolter with colleagues (2014) and Criss, Shaw and Ingoldsby (2003) found one factor that cause behavior problem could be the parenting style, example a low or negative synchrony among parent-child (interaction with hostile voice, non-focused and non-responsive dyad) is associated with behavior problems, such as aggression and withdrawn behavior. Another risk factor can be the neurobiological condition such as Attention Deficit Hyperactivity Disorder (ADHD); it is one of the most diagnosed developmental behavioral disorder in schoolchildren (APA, 2000).

Learners with ADHD may have difficulties in academic works and children with the hyperactivity and impulsive subtype may have behavior and disciplinary problems (Pavlidis & Giannouli, 2013). Children with internalizing problem in the preschool environment may not be productive and engaged enough in the activities, the teachers need to identify these children socially at risk and integrate them with the peers so not to be excluded by the peers.

1.4 Preschool

Preschool education is considered important in the child's development; it is located in the microsystem, according to Bronfenbrenner's ecological model (1994), it is the smallest and immediate environment in which the child lives, comprising of school, peer group, family and neighbors.

The preschool environment is structured in a way to promote activities such as learning through play and sharing between children. A positive tone interaction between teachers and children contribute in creating an environment, where positive relationships with peers are promoted (Howes, 2000 & Howes et al., 2011). Not only are the roles of teachers important but also the role of the parents when these have positive consideration about the child's schooling. These people will have a big impact and influence the development and learning of the child (Şahina, Sakb, & Şahin, 2013, Bronfenbrenner, 1994). On the same line of thoughts, negative environment will also have negative consequences for the child. Given this fact, it is necessary for the child to be in an environment as positive and stimulating as possible (Werner, 2000).

People have different opinion of the importance of preschool, according to researches, some parent consider preschool education as a way of preparing their child for school, as important for the development of the child, sharing social skills and making friends (Şahin, Ramazan, & Şahin, 2013 & Ang, 2014). Different countries use different names and ages to refer to preschool; it is also referred as daycare, kindergarten and nursery school.

The United Nation's convention on the rights of the child guarantees the right for (primary) education for all children (UN, 1989). Each nation has developed different educational system indicating different starting ages for preschool and middle school. According to the data provided by the International Standard Classification of Education (ISCED), countries such as Belgium and Germany provide preschool education to children from age one to six, Ireland from three to six and Sweden from one to six (European Commission, 2014) . For convenience, this study will consider as preschool children, children between the ages of two to six (2-6).

1.5 Current problem/rational

Internalizing problems have negative impact on children; it can interfere with the academic work leading to exclusion in the classroom. According to Danzig et al. (2013), there has been little research on the effect of internalizing disorder on peer relationship. It is essential for teachers and professionals to gain knowledge on how behaviour and temperament are related to peer interaction to be able to identify the children and provide interventions for those socially at risk.

1.6 Aim and Research questions

The aim of this systematic review is to examine how shyness (internalizing problem) can affect the peer interactions (relationships) in preschool children between the age of two and six. Specifically, the paper will focus on these questions:

1. How are children defined shy in the preschool environment according to literature?
2. How is the interaction with peers affected by shyness?
 - a. What tools are used to assess shyness and peer interaction?
 - b. How is shyness and peer interaction related?

2 Method

A systematic review was conducted for this paper, meaning a collection of scientific papers about a specific subject was performed. The aim of a systematic literature review is to show the amount of research done on a specific subject and gather all the results. This is done by mapping the field of knowledge, conducting a transparent and replicable search for the articles, extracting the data and reporting the results (Jesson, Matheson & Lacey, 2011).

2.1 Study design

This study is a systematic review of the literature executed using database keyword searches in March 2016. Data from Academic Elite, the Educational Resources Information Center (ERIC), Psych Info and CINAHL were searched. These databases provide a high quality of articles from academic journal from the field of education to psychology and health. A protocol was produced and used in the selection of articles.

Table 2.1

Study search terminology

Peer interaction/ peer relationship
 Shyness as in internalizing behaviour problem
 Preschool children/toddlers / young children
 Preschool environment/ nursery/kindergarten

Search terms were used based on the aim of the study. Possible variations and abbreviations were made to find adequate materials. These terms were developed using the Thesaurus in the database ERIC and they were chosen based on their significance. Terms like ‘peer interaction (peer interact*, peer relationship)’, ‘shyness’ considered as an internalizing behaviour problem, ‘preschool children’, and ‘preschool environment’ were the terminology searched for in the titles, abstracts and keywords of the articles (see **Table 2.1** for full list of search words). In some cases, where it was available, Boolean operators helped in narrowing down the results to the relevant ones.

2.2 Selection Criteria

According to **Table 2.2**, this study included only empirical studies: qualitative, quantitative and longitudinal studies. Articles that were chosen for this study were primary research studies published in English between the ages 2000 to 2015 in peer-reviewed journals. Articles included focused on shyness in preschool children, studies done in the preschool environment with the teachers’ rating of children’s internalizing problem i.e. shyness in preschool context.

Table 2.2

Inclusion and exclusion criteria for abstract and full text review

Inclusion criteria	Exclusion criteria
Participants: -children two to six years and attending preschool	-Studies with participants older than six ages
Articles on: -Peer interaction, -Social interaction in preschool environment, -Children with internalizing behaviour problem “shyness”	
Environment: -Studies done in preschool environment, where we have the teachers response/rating	-Studies done in different environment than the preschool environment such as at home, laboratories
Publication type: -Peer reviewed articles publish from 2000 to 2015 -Articles from peer reviewed journals -empirical studies: qualitative and quantitative studies -Articles in English	-Articles published before 2000 -Books or articles from non-peer reviewed journals -Reviews, book chapters and conference papers -Articles published in other language

In conclusion, studies were to be conducted in the USA, Canada or in Europe. This review did not include sections from printed books, conference abstracts, articles from non-reviewed articles, studies done at home or environment different from the preschool environment, studies on interventions, with participant older than six years and articles published before 2000 in other languages.

The studies included in this review comprises children between two and six years of age, due to the development that take place during this stage, in preschool settings displaying shyness as internalizing behaviour problem.

2.3 Abstract search

An inclusion and exclusion protocol on both abstract and full text level was used to search for empirical studies appropriate for the research questions. Initial selection of articles was based on heading level. Next, the abstracts of the relevant articles selected were screened through the protocol made on an excel sheet, which contained name of authors, title of article, year of publication, group and age of children, environment of research and the type of internalizing behaviour, in this case shyness. This was used to record the articles that met or did not meet the inclusion criteria. If the article did not meet one or more of the inclusion criteria, it was automatically excluded. Then finally, the relevant articles for the reviewed were retrieved.

Free search was used in the database Academic Elite, search words used were ‘shyness in the classroom AND preschool children AND peer relationship’. The search limitations was for articles in peer reviewed journals, in English, published from January 2000 to December 2015. This combination of search words yielded five results. After reading the abstract, one article was excluded for the environment and another one did not contain the inclusion criteria, remaining with three for the full text.

In ERIC, thesaurus was used during the search, shyness AND preschool children OR toddler OR young children AND peer relationship were the words used during the search. Limitations included articles from peer-reviewed journals, in English, published from January 2000 to December 2015 and the search developed nine results. During the reading of the abstracts, two articles were excluded for not containing the right country and the inclusion criteria. With seven remaining.

Advanced searching in Psych-info was used by using the following strings (shyness in children) AND (children in preschool OR the young child) AND (peer relationship). The options peer reviewed articles, date of publication from January 2000 to December 2015 and the age group of children from two to six years, limited this search, which gave 36 hits. After reading the abstract, twenty-seven articles were excluded in total, twenty-four did not meet the inclusion criteria, one was in a language different from English and two from different country included in the inclusion criteria. Which resulted in 9 remaining articles.

Basic search was used in Web of Science by using the following set of search words (shyness in the classroom) AND (preschool children) OR (preschool environment) AND (peer relationship). The searching was refined by the following. Articles in English, countries included in the inclusion criteria and the date of publication, which resulted in 42 results. The 36 articles were excluded due to incorrect topic, different type of document, group of children according to ages, country and did not meet most of the inclusion criteria. 25 articles were included for the full text review.

2.4 Full text screening

A detailed protocol was created based on inclusion and exclusion criteria for the full text review. A small sample of articles were used to evaluate the protocol for any eventual revision. The protocol was divided into two parts: the first included general information about the date of publication, year, country and the population of the articles. The second part consisted of more detailed information such as the type of children involved in the study, the age group, how the study was carried out, if the results were related to the aim of the review and in conclusion, the texts were read through to examine the type of measurement used in peer interaction.

At the end of this process, some articles that did not meet the inclusion criteria were excluded for the data extraction: articles that were duplicate, of studies of shy children done in laboratories or planned settings, published before January 2000, which was the inclusion date, containing the wrong topic and the wrong age group .

2.4.1 Peer review

A second reviewer assessed 50% of the included articles at full text level to test its validity to be included in the study. Though there were some little differences, after discussing those all the articles were included for the study, since they were not too ambiguous to be excluded.

2.5 Data extraction

Data was extracted using a data extraction tool (combined with the full text protocol, see Appendix 2). Extraction data included author's name, title, country and year of publication. Other details such as the size of the sample, study design, age groups involved were included. Tools used for the measurement, information about how the participants are defined shy and how this behaviour affects their relationship with their peers, were also extracted through this tool.

2.6 Data Analysis

A data analysis was performed during the data extraction. Given the nature of the first research question, the reviewer read and re-read the selected articles to become familiar with the ideas and language used by the authors. After this, the reviewer identified and extracted the words and definitions used to describe and discuss shy children. Definitions given by teachers and parents were extracted and coded for the final results according to their similarity and differences. Categories were created to answer to the question "how children are defined shy" in the selected articles.

Next, the researcher analyzed the data and results from the included article to find out what instruments were used for assessing shyness and peer interaction and in conclusion, how the shyness in children in preschool affect peer relationship/interaction.

2.7 Quality assessment

To assess the quality of these articles, an all-ready-made guideline produced by the Health Committee of the Royal Swedish Academy of Science was used. This tool contained different parts and sections for a full text review, the part used and appropriate for this part of study was the part 8.2, section M and N, named quality of study description and overall quality of study, which contained information about how to perform a quality check for an article (see Appendix A). The quality assessment tool asked questions about how detailed description of context, sample, method and data analysis were made and how accurate the method and choice made in the articles selected for the systematic review. Articles were rated high if they contained all the details asked in the tool; medium if the articles respect 70% of the requirement and low with 50% of details granted.

One researcher performed all the steps, starting from the selection of articles (review of abstract and full texts), to the data extraction and finally the quality assessment.

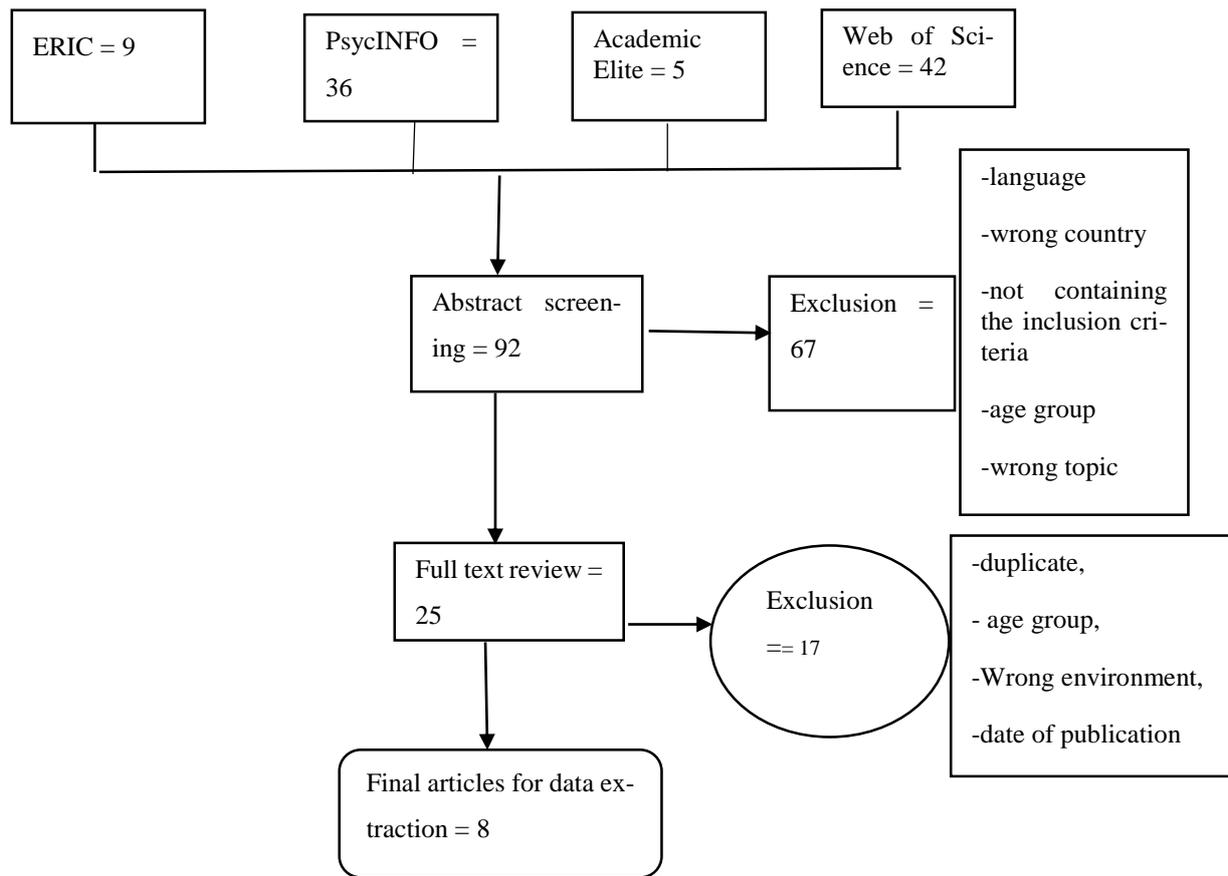


Figure 1. Flow chart of the searching process

3 Results

3.1 Search results

For this review, four searches were implemented resulting in 92 articles. After reading the abstracts and limiting them with the inclusion criteria, see **Table 2.2** for full list, 29 articles were excluded for not including most of the inclusion criteria, four for studies done in other countries different from the USA, Canada and Europe, two for being studies completed in laboratories and written in a language different from English. Twenty-nine more articles were eliminated for containing the wrong topic, thus different from preschool children’s shyness and how it affect their relationship with peers, one article contained a population that differed from the one this review is interested in and finally two other articles were excluded for not been empirical studies.

At the end of this first abstract screening, all the remaining articles were put together resulting in 25 articles for the full text review. These articles were retrieved and reviewed in

full with a protocol. At this stage, five articles were removed as they were duplicates, five articles, though they were eligible according to the inclusion criteria, contained different topics like peer play and theory of Mind, externalizing behaviour problem and the effect of parent's role on development of behaviour problems. Three were published before our inclusion date, thus between January 2000 to December 2015, two were studies done in laboratory and two had participants that were attending the first grade class, meaning they were between 6-7 years of age and therefore not suitable for this review. **Figure 1** shows the results for this review, yielded at different stages of the searching process. After all these exclusions, eight studies were included in the review.

Table 3.1
Quality assessment of the included articles.

Articles	Valiente, et al, 2012	Coplan, et al, 2007	Rudasil et al., 2014	Sette, et al., 2014	Acar et al., 2015	Justice et al., 2008	Buhs et al., 2014	Coplan & Prakash, 2003
Quality	High	High	Medium	High	Medium	High	High	Medium

After the quality check, five out of the eight article included were rated high and three were ranked as of medium quality (see **Table 3.1** for details). Despite the rating of the quality of these studies, all eight papers were included in this study due to the limited articles found on this subject.

3.2 Study characteristics

Of all the eight studies included in this review (detailed characteristics of the included articles can be found in **Table 3.2** and in Appendix B), five were studies conducted in the USA, with two in Canada and one in Italy. Four of the studies were longitudinal studies and although it was not explicitly stated, a mixed method was used in the remaining four. The data presented in these studies were of children aged 3 to 5 years, 11 months. The studies included a sample size ranging from 40 to 1364 children.

Table 3.2
Characteristics of the included articles.

	Country	Method	Sample size	Age groups	Children in focus*	Information provider**
Valiente, et al, 2012	USA	Mixed	291	M=67.72m	N	C, P, T
Coplan, et al, 2007	Canada	Longitudinal	197	M=64,13m	N	P, R, T
Rudasil et al., 2014	USA	Mixed	104	M=4.22y	N	P, T

Sette, et al., 2014	Italy	Mixed	129	M=4.92y	N	P, T, C
Acar et al., 2015	USA	Longitudinal	40	M=45.67m	N	P, R
Justice et al., 2008	USA	Longitudinal	133	M=52.6m	R	T
Buhs et al., 2014	USA	Longitudinal	1364	54m	N	P,
Coplan & Prakash, 2003	Canada	Mixed	135	M=48.68m	N	T, R

*N= Children with normal development; R = Children at risk

**P = Parents; T = Teachers; C = Children; R = Research assistant

Seven of the articles focused on normal developing children, while one had children at risk as participants (Justice et al., 2008). All the studies were done in the preschool environment and data were collected through preschool teachers, parents and in some case by the research assistant. In two articles, children were also included in the collection of the data in specific when it comes to giving preference for peers (Sette, et al., 2014; Valiente, et al, 2012). Teachers' definitions were more related to what happened in the classroom and with their peers (Rudasil et al., 2014; Sette, Baumgartner & Schneider, 2014; Justice et al., 2008), while answers from parents were related to happened outside and the emotional feeling from their children (Rudasil et al., 2014).

In majority of the studies, the tools used were Child Behavior Scale (CBS) and Child Behavior Questionnaire (CBQ) to access the behavior of the children, Student-Teacher Relationship Scale (STRS) to examine the type of relationship between teachers and children based on their behavior and Playing Observation Scale (POS) to observe and code children's behavior during free play.

3.3 Shyness definitions

Seven major categories were created according to the context in which the definition is related (details in **Table 3.3**).

Table 3.3

Definitions provided in the selected articles.

Articles	Definitions of shyness							
	Related to school liking/adjustment	to disliking/adjustment	Verbal intelligence	Student-teacher relationship	Internalizing problem	Lacking enjoyment in play	Isolation and rejected by peers	Spend time alone
Valiente et al., 2012	X			X				
Coplan et al., 2007	X				X		X	
Rudasil et al., 2014)			X			X		X
Sette et al., 2014				X	X		X	
Acar et al., 2015				X			X	
Justice et al., 2008			X	X				
Buhs et al., 2014							X	
Coplan & Prakash, 2003				X				X

When children were assessed with the various tool of measurements, two of the articles concluded that shy children had difficulty liking and adjusting to the preschool environment (Valiente et al., 2012; Coplan et al., 2007), consequently dislike attending preschool and had difficulties being engaged in the activities. In the same school context, children in five studies were defined according to the relationships with their teachers (Valiente et al., 2012; Sette et al., 2014; Acar et al., 2015; Justice et al., 2008; Coplan & Prakash, 2003).

In two studies, where children were assessed mainly according their language and attention skills, teachers provided a definition of children's shyness based on their verbal intelligence (Rudasil et al., 2014; Justice et al., 2008).

Children who stay in isolation because they are rejected by their peers were also classified as being shy in four articles (Coplan et al., 2007; Acar et al., 2015; Sette et al., 2014; Buhs et al., 2014). Similar to this definition, two studies identified spending time alone, socially less competent and been withdrawn from peers (Rudasil et al., 2014; Coplan & Prakash, 2003) in children considered shy. According to the parents report with the CBQ, their shy children tend not to enjoy and express interest in the play with peers (Rudasil et al., 2014). In conclusion, two articles reported children with internalizing problem as being characterized as children with shyness (Coplan et al., 2007; Sette et al., 2014).

Table 3.4

Measurements and results related to shyness and peer interaction.

studies	Definitions*	tools & Measures	Results after measurement
Acar et al., 2015	Shyness: withdrawal during engagement with peers, quietness around peers and being unpopular and rejected by peers.	inCLASS-Children's peer interactions: sociability, communication, assertiveness and conflict, CBQ- shyness, inhibitory control and attentional focusing	Shyness, peer communication and peer conflict at two level of attentional focusing were measured: at a higher level – shyness was unrelated to peer communication and peer conflict. At lower level – shy children had less and difficulty with peer communication.
Buhs et al., 2014	Shyness leads to peer rejection and victimization	CBQ-children's shyness sociometric status questionnaire and two items from Ladd's measure for peer acceptance and rejection -peer rejection and acceptance	Shyness is related to less rejection with peers.
Coplan et al., 2007	Shyness- peer exclusion, rejection and victimization; poor quality relationship with peers.	SCI- shyness and reticent behaviour. SDQ- emotion symptoms and peer problem CBS- social adjustment and behaviour problems to peers	Shyness - internalizing problem, peer difficulty and negative school adjustment.
Sette et al., 2014	Shy children present asocial behaviour, peer exclusion	CBQ- discomfort in some social situations, Picture sociometric procedure- peer liking	Shyness associated with internalizing problem, isolation and peer rejection.

Note:*Definitions given in the background.

3.4 Definitions of shyness related to peer interaction

Out of the eight articles used in this review, (see **Table 3.4**) only four articles demonstrated the relationship between shyness and peer interaction (Buhs et al., 2014; Sette et al., 2014; Coplan et al., 2007; Acar et al., 2015). The most common definition of shyness related to peer interaction given by the authors of the included articles before the measures were been taken was peer rejection and exclusion (Acar et al., 2015; Buhs et al., 2014; Coplan et al., 2007; Sette et al., 2014). One article (Acar et al., 2015) describes how shyness in children can lead to withdrawal during engagement and consequently can lead to the children being unpopular and rejected by friends. Coplan and workmates (2007) discuss how the same kind of behavior can deteriorate the quality of relationship with peers.

3.5 Instrument and measurement

In all the articles, the outcome was measured using similar tools. The most used tool was the Child Behavior Questionnaire (CBQ), which is a questionnaire used by parents and teachers to measure temperament in children. Three out of the four articles used this tool to

measure shyness and other behavior related to it (Acar et al., 2015; Buhs et al., 2014; Sette et al., 2014), while in one study a similar tool called the Social Competence Inventory (SCI) to make an assessment of shy (Coplan et al., 2007).

To evaluate peer interaction, different measurement tools were used in all the articles (for details, see **Table 3.4**). Individualized Classroom Assessment Scoring System (inCLASS) was utilized to assess the communication, conflict and assertiveness in peer interaction (Acar et al., 2015). Two articles measured peer exclusion and rejection with two different tool: sociometric status question-naire and two items from Ladd's measure for peer acceptance and rejection (Buhs et al., 2014) and Picture sociometric procedure (Sette et al., 2014). The Strength and Difficulties Questionnaire (SDQ) was used in Coplan, Arbeau and Armer's (2007) work to assess the children's emotional symptoms and peer problems.

3.6 The effect of Shyness on peer interaction.

Four of the included articles related shyness to peer interaction. A negative connection, that shyness leads to peer rejection, exclusion, victimization and poor peer treatment, was issued in Coplan, Arbeau and Armer (2007) and Sette, Baumgartner & Schneider's work (2014), while Buhs and colleagues (2014) included in their work that shyness was not necessary connected with peer exclusion and less communication.

It was possible to identify in two articles that children with shyness were rejected during peer interaction and these children presented internalizing behaviour problem traits (Coplan et al., 2007; Sette et al., 2014); on the other hand, we found how a low attentional focusing can affect negative the peer communication with a shy child (Acar et al., 2015).

4 Discussion

Since the aim of this review was to gain information on how much research has been done on shyness as an internalizing problem and its effect on peer interaction, this review examined definitions used in literature to characterized children with shyness and how this behaviour can affect the peer interaction by using extractions from eight studies. Definitions related to children's shyness in general were provided in all eight articles and they were linked to how they react in different situations such as having a difficult time with teachers, with peers, spending time alone and having internalizing problem traits. In four of these, definitions were related to

peer interaction and the consequences it can have. Being shy in relationships has the consequences of being rejected and isolated by peers, though in the results of one article, it was proven that shyness was not related to having less communication problem and less interaction with friends.

4.1 Definitions of shyness

Results indicate that there are many and different definitions provided by teachers and parents regarding shyness in children and sometimes this defers depending on the environment or the person assessing the child: when teachers rated children, their response was based on what happened at school and on the other hand parents' ratings were based on other social encounters. (to have an overall of this results, see **Table 3.2**) Teachers and parents, who are in the environment nearest to the child, give different report of children's behaviour, although parents may know their child better, they may tend to be positive when assessing their children. Looking at the results provided, most often parents' rating of shyness is based on the behaviour their children have around strangers (Rudasil et al., 2014), while teachers' consideration is influenced by the relationships with peers in the classroom (Sette et al., 2014; Rudasil et al., 2014). On the other hand, teachers have the possibility of observing children in multiple and different situations in the classroom, including comparing them to other children of the same age group to have a complete picture. However, teachers may not have information about the child's behaviour in other social context to provide a holistic view of the child. Results from previous research show the reciprocal influence between the child and the microsystem, where teachers and parents are also located (Bronfenbrenner, 1994). The consideration these people have on the child will influence their behaviour towards the child and will affect the learning development; on the other hand, it is also true that the environment or context factor is important when rating, since this may affect the way the child behaves.

According to the results in **Table 3.3**, four articles of this literature review (Coplan & Prakash, 2003; Justice et al., 2008; Rudasil et al., 2014; Valiente et al., 2012), poor teacher-child relationship, non-adequate verbal intelligence, school disliking and maladjustment and spending time alone are some definitions related to shy children. Researches have shown that teachers with warm and positive behaviour help children develop academically and socially. Not only do they improve academically, but being near teachers provide them a support that allow them to be continuously engaged and make good use of the time in the classroom by

interacting and gaining information that facilitate the language, cognitive and social development of the child. As the type of relationship between teacher-child is influenced by the characteristics of the child, children with shyness are described to have less close relationship with their teachers, because of their lack of confidence and less engagement in social situations (Valiente et al., 2012; Sette et al., 2014; Acar et al., 2015; Justice et al., 2008; Coplan & Prakash, 2003). Consequently, they may not benefit from this relationship like other peers do, evidence for this is provided by Rydell and colleagues (2005). In addition, teachers tend to have lower expectations from shy student due to their less participation and engagement in the class (Hughs, Coplan & Kamphaus, 2010). On the other hand, another study done by Baker and colleague (2008) demonstrate that positive relationship between student and teacher can be a positive factor for children at risk by providing warm and coping strategies that may be used in difficult moments.

Verbal intelligence is an important term when it comes to social skills or competences. Children use these skills to express what they want and to create relationships with people around them (Stanton-Chapman, Walker & Jamison, 2014). When the language development is delayed, the child's ability to be engaged in play and social situations with peers and adults diminishes; hence, this leads to delay in social development. According to some studies (Bronfenbrenner & Morris 1998, Bowlby, 1958), the development of verbal and communication skills is linked to the child's proximal environment, the early relationship and experiences, therefore it is important that these experiences are appropriate and positive for a better development.

Difficult teacher-child relationship and non-adequate verbal intelligence leads to shy children disliking school and not being able to adjust to the environment. Literature provides clear evidence that shy children tend to avoid social gatherings so not to feel anxious and embarrassed (Rubin et al., 2009). Children not feeling adequate, enjoying the company and what is going on at school, being victimized, feel bored and their positive sentiment towards school diminishes. Beside this, safe and supported children are found to like and enjoy school and its activities. Contrary to what social children are (having good peer relationship, being expressive and open to new experiences), withdrawal children spend time alone and in isolation. These signs of isolation (being alone because of anxiety or lack of social skills) though similar should not be confused with active isolation (being around other children after being rejected by peers) (Rubin & Asendorpf, 2014). According to the explanations given, the results also confirm and

indicate that shy children can be identified as being rejected by peers because of their lack of social skills and reticent behaviour (Coplan, 1998).

Low sociability, the fact of not been exposed to social event and interaction, predict children with shyness´ lacking of enjoyment in play with peers. As it has been proven that children with internalizing problem have lower interactive peer play skills and are negatively associated with fear and self-esteem, that may lead them been left out during play with friends (Bulotsky-Shearer et al., 2012).

4.2 Measurement tools

Many tools and methodology can be used in assessing shyness and peer interactions. These measurements included parents and teachers rating about children behaviour and shyness, peer interactions, relationship and peer rating. For an overall view of the measurements, see **Table 3.4**. Shyness was assessed together with other behaviours related to it with one of the most familiar instrument when it comes to temperament and behaviour, the Child Behaviour Questionnaire (CBQ). Another instrument similar to this, the Child Behaviour Scale (CBS) was used by teachers in assessing behaviour problems related to peer and how children in preschool socially adjust to the environment. To examine the peer interaction and how it relates to shyness, the Individualized Classroom Assessment Scoring System (inCLASS, Downer et al. 2010), which is used to measure engagement with peers and teachers, was used. In particular, the sociability and communication between peers was assessed.

The measurements lacked something important during the assessment, according to Bronfenbrenner´s theory (1994), there is a continuous influence between the person and the environment. None of the instrument measured the context to find out how it interferes with the children´s behaviour. Measurements should have been taken in different environment to verify their influence of the child and the change in behaviour. Considering that shyness in children may be caused by the setting, atmosphere and the way the teacher interact with the children in the classroom as it has been proven in Howes´ work (2000), a positive environment can promote a positive relationship with the peers.

4.3 Shyness and peer interaction

According to Rubin (2009), shyness affects peer interaction and from the results above, it appears that shyness is negatively related to peer interaction and consequently social interactions. Shy children avoid social gatherings and social interactions that help develop social relationships, where social skills are put into practice. Shy people are known to talk less and hardly

start conversation, this may imply why children with this behaviour are rejected by their peers as it has been confirmed by the results from Gazelle and Ladd's (2003) work. According to two articles (Coplan et al., 2007; Sette et al., 2014) peers rejection and the preference not to interact with children with withdrawal behaviour is because of their internalizing problem. There is a link between shyness and internalizing problem, children with internalizing problem manifest their behaviour as shyness (Eggum-Wilkens, Valiente, Swanson & Lemery-Chalfant, 2014) and according to Fontana and other researches (2003) children with this behaviour are unlikely to establish positive relationships in the future.

Shyness at this early age can be on the long run have negative consequences. Poor peer treatment might increase the child becoming more introvert and affect negatively the behaviour. This period is when children learn and practice together with peer to take turn in play, cooperate, imitate and start developing their self-esteem and self-identity (Markus & Nurius, 1984; Hawley et al., 2002). Not being involved and cooperating in this kind of activities might undermine the development of certain skills and foundations without which the child may be limited in some social situations, such as peer interactions. Shyness can be an obstacle to communication between peers. This group of people are known to interact less socially and when in interaction their actions may discourage the communication since they may not talk and develop silence as response (Cole & McCroskey, 2003).

Contrary to most of the results of the selected articles and previous research, Buh and colleagues (2015) found out that shyness was less related to peer rejection and exclusion. Rather it is argued that they are less rejected and this is associated with a higher level of engagement. This results may be justified by the fact that the environment the children under examine lived in was stimulating and equipped enough to allow they interact and not be rejected by their friends (Howes et al., 2011).

In conclusion, according to the Convention on the Rights of the Child (UN, 1989), children have the right to participate in the everyday activity of the family and community. Therefore, shy children should be accommodated in the environment and be able to participate and be engaged as their other children. As it is stated in the definition provided by WHO (2001) in the International Classification of Functioning Disability and Health (ICF), participation means the involvement in the life situation and engagement in the life situation. Henceforth, shy children in the preschool environment have the right as children to be engaged and be involved in the same activity as the other children. Therefore, it is the duty of teachers and staff to provide available and accessible environment that will allow the child to be active and participate with

the same intensity and involvement as the others without been victimized and rejected by the group.

4.4 Limitations of the study

For this review, only four databases were used, due to the field of interest. However, since many other databases were not searched through, some articles may have not been found. Another problem at hand was the different databases used during the search, these had different ways and methods of searching, some presented thesaurus words so synonym of search words could be found, while others did not have this function, in this way documents eligible for this review were not found. Another way of finding more articles was doing a hand-search by going through the references of the studies selected for this review but that was not done due to the limited time the author had at hand.

Many studies were excluded due to the wrong group of children; there is a lack of research on children between the ages of two to six and sometime they are hard to find. Most of the studies are done on children from the late childhood meaning from seven to eleven.

There may have been studies that were missed by the search strategy, the initial intention was to search for shyness as an internalizing problem, so only few articles were found with this intent. Maybe amplifying the search and using more and different search words would have been better. The choice of words and inclusion criteria narrowed and limited the possibility of finding more studies. Potential limitations were curbing the search to only studies in English by excluding studies in other languages known by the author and excluding studies published before 2000 and after 2015, it is possible that other studies suitable for this review would have been found before and after the date of publication included. However, this was done to have access to only recent studies available. Studies were conducted in specific continents and countries such as USA, Canada and Europe; this makes this study not to be generalizable to other populations in different parts of the world. How shyness is considered in these countries may be different from certain countries like China or other developing countries.

Use of a personal protocol created by the author for this review may have presented bias and exposed the work to not finding adequate information. Maybe deciding to use an all-ready-made protocol that has been tested various occasions would have been a better choice. Quality assessment was done with all the included articles; exclusion was not based on this assessment due to the limited and small amount of articles available and accessible to the author for this work.

The strength of a systematic review is to report in detailed all the processes and analysis of every choice made to make the study reliable and replicable. All though the author tried to be transparent and gave account of all the process, this work can still present bias if the selection of the articles were effected and influenced by the preconceived ideas of the single reviewer.

4.5 Future research

During the search for articles on internalizing behaviour problem, it came to the attention of the author that very little research or almost nothing has been done concerning this subject. On the other hand, a lot of research has been conducted and article written on externalizing problem. Externalizing problems are visible and can be observed, so it can be easily studied, on the other hand, internalizing problem can be really internalized and cannot be understood if not in the extreme cases. However, this does not mean, it is not a problem causing harm to young children. Internalizing problem in children is not allowing children to form friendship with their peers and have adequate interaction with them. Researchers and practitioners needs to come together and work to provide adequate and enough information for teachers and parents to handle their children with behaviour problem.

In most of the selected articles, teachers and parents rated on the children's behaviour or temperament and its consequences. This may result in answers being biased, parents and teachers may pay attention at only certain occasions. Asking peer ranking may have given certain characteristic/ aspect of peer attitude not known to the adults. Moreover, most of the ratings were done by mothers and the fathers voices were lacking in most of the articles. In future research it will be interesting to explore and examine fathers' ratings and considerations about their children's temperament and behaviour problem, they may give other perspective not yet undiscovered to the results.

It was also noticed that shyness in most of the articles was considered as a temperament trait and not a behaviour problem. Some authors argue that this trait with time can be alleviated by providing positive environmental factors, though others believe that childhood shyness can be a risk factor for future behaviour problem (Rubin & Coplan, 2010). Results from this review and other research done provide the evidence of where to start with interventions. Starting directly with parents with strategies and then to teacher and school with the techniques to handle shy children and keep them engaged in the class activity would probably improve the behaviour outcome of these children.

5 Conclusion

Almost all the papers included in this review stated that shy children lack social skills, have reticent behavior and therefore are excluded, rejected and victimized by their peers. These characteristics of shy children negatively affect the consideration friends and teachers have of them. Teachers most of the time assess them as being less intelligent compared to their less shy peers. Again, compared to their age mates, shy children were defined as having internalizing problem and symptoms of social withdrawal traits. When it comes to examining how shyness affect the interaction with people, it was found that there was a negative relationship. According to the results, shy children receive from their peers a poor treatment, have less communication with peers due to the fact that, they prefer most of time staying on their own, in order not to get into embarrassing situations.

In view of this, parents should involve their shy children in social activities with peers, where it will be possible to pick up some social skills, since it was reported in some articles that children are sometimes excluded from activities and communication with peers because of a non-sufficient development of this skills. When it comes to the preschool level, teachers should organize their classrooms well to engage and promote peer interaction, according to research the positive atmosphere created by the teacher in a class, helps student come out of their shell and motivate children to create positive peer relationships. Another duty of teachers in the pre-school environment is to identify and support children who display shyness, since teachers have an impact and influence the development of learning of the children, intervening earlier might provide factors that may help the child make friends and develop the needed social skills.

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7 Appendix

Appendix A

Quality assessment tool (taken from the Health Committee of the Royal Swedish Academy of Science. Section M & N).

	Is the context clearly described?	Is the aim stated?	Is there adequate description of the sample used and how are they recruited?	Is there an adequate description of the method used in data collection	Is there adequate description of the data analysis?	Is the research replicable?	Is the research design appropriate for the research question?	Are the results generalizable?	How do you evaluate the overall quality of the study?
Kindergartners' temperament..									
Don't fret, be supportive!									
Parent vs. teachers rating of children									
Shyness, child-teacher relationship									

Temperament and preschool..									
Relationships between teachers and preschoolers									
Shyness and engagement									
Spending time with teacher									

Appendix B (combined data extraction and data analysis tool).

Name	Title	Year / coun- try	Stud y de- sign	Sam- ple size	Age group	Tool of meas- urement	How participant are defined shy	How is peer interac- tion measured?	How it affects peer interaction
Va- liente, Swan- son & Lem- ery- Chalfa nt	Kinder- gart- ners’ temper- ament, class- room engage- ment and stu- dent...	2012/ USA	Mixe d	291	M=5 years	Parents’ ques- tionnaire to as- sess impulsivity, shyness and ef- fort control; teachers’ ques- tionnaire impul- sivity, anger, shyness, class participation, school liking and teacher-student relationship.	With the mixed / model regressions, shyness was nega- tively related to school liking (slope=-3.52, p< .01).	/	/

Coplan, Arbeau & Armer	Don't fret, be supportive!	2007/Canada	longitudinal	197	M=64.13m=5.4yrs	Mothers used Child Social Preference Scale to assess child shyness, trained research assistants used the Play Observation Scale to observe free play; teachers rated children's shyness with the Social Competence Inventory and also used the CBS	Child shyness was significantly and positively associated with internalizing problem, difficulties with teachers, lower demonstrated academic competence and negatively to school adjustment	The Social Competence Inventory was used. Teachers assessed children based on their social initiative (e.g. she/he is hesitant with peers, he is a spectator than a participant while others play etc.). The subscale of excluded by peers of the Child behaviour Scale was also used to assess children's social adjustment.	A child's shyness is positively associated with peer difficulties.
Rudasil, Prokasky, Tu,	Parent vs. teacher ratings	2014/USA	mixed	104	M=4.2 yrs	Both parents and teachers used the CBQ scale to assess the children.	Parents and teachers rating of shyness and low sociability were positive and significant though they had	/	

Frohn, of chil-
Sirota dren's
& Mol- shyness
fese.

Trained re- two different mean-
searchers used ing for parents, their
the PPVT, EVT children lacked en-
and NEPSY joyment in playing
with others but spent
time with their par-
ents where they inter-
acted with them and
learned more vocab-
ularies. meanwhile
for teachers, these
children spent time
alone in the class-
room, they with-
drawn from their
peers resulting in less
engagement and by
extension less devel-
oped skills.

Sette, Baumgartner & Schneider	Shyness child-teacher relationship..	2014/ Italy	mixed	129	M=4.9 2 years	Parents completed the CBQ, teachers used the STRS and SCBE	com- pleted the CBQ, teachers used the STRS and SCBE	According to teachers, shy children are reported to have internalizing problem, isolation and rejected. At lower level of child-teacher closeness, there is a negative association between shyness and social competence	Children were asked to sort their friends into 3 categories: children I want to play with; children I kind of like to play with and children you don't like to play with.	They tend to be rejected and victimized by their peers.
Acar, Rudasil, Molfese, Torquati & Prokasky.	Temperament and preschool children's peer interactions	2015/ USA	longitudinal	40	3-5 years	inCLASS was used to measure peer interaction, parent assessed children's temperament with the CBQ.			Children were observed 15 mins for 4 days each morning in different settings by a trained observer. The inCLASS was used for this: peer communication and how it was initiated, sus-	Shyness was negatively correlated with peer conflict, $r=-.37$, $p=.009$. when attentional focusing was high, shyness had no significant influence on peer communication, on the other

Justice, Cottle, Mashburn & Rimm-Kaufman	Relation- ships between teachers and pre- school- ers..	2008/ USA	lon- gitu- dinal	133	3 yrs to 5yrs 11mths	Teachers completed the STRS, Fluharty- 2 and PPVT- III	com- ness is negatively associated with chil- dren's shyness (r=- .26, p<.01), shy children rarely de- velop and maintain relationships with their teachers.
Buhs, Rudasi, Kallutskaya	Shyness and en- gage- ment..	2014/ USA	lon- gitu- dinal	1364	54mont hs – 6yrs	Mothers meas- ured children's shyness with the CBQ; teachers observed the class with the	Teacher-child close- ness is negatively associated with chil- dren's shyness (r=- .26, p<.01), shy children rarely de- velop and maintain relationships with their teachers.

tained and how it varied. Peer assertiveness: initiation and leadership behaviour and lastly peer conflict.

hand, when attentional focus was low, shy children displayed less peer communication (= -4.08, p<.001).

Teachers responded to questions in the Ladd questionnaire to child is disliked by peers, children do not

Shyness was negatively associated with peer rejection (standardized path coefficient: -.09, p<01) and positively predicted

**&
Griese.**

classroom obser-
vation system
and peer rejec-
tion was assessed
through a socio-
metric status
questionnaire
and a 2 items
from Ladd's peer
acceptance/rejec-
tion.

like to play with him”
and they were rated
on a Likert-type scale
from 1 to 7.

engagement (.06,
p=.06) indicating that
children with high
level of shyness may
tend to score low on
peer rejection. On the
other hand, peer re-
jection was a nega-
tive predictor of en-
gagement, children
dislike by peers have
lower levels of class-
room engagement.

Coplan Spend- 2003/ mixe 135 33 – 66 Children's be- Shyness in children
& Pra- ing time Can- d months haviour was is associated with
kash with ada measured using more frequent non-
teacher.. teacher.. POS and CBS by social play.
teachers.